

**Lisa Schwenk**  
Department of Justice  
Bureau of Alcohol, Tobacco, Firearms and Explosives  
Forensic Science Laboratory – Washington

---

**OCCUPATION**

Forensic Chemist

---

**EDUCATION**

**Master of Science in Forensic Science**, May 2008  
Virginia Commonwealth University (VCU), Richmond, VA

**Bachelor of Science in Chemistry**, May 2006  
State University of New York (SUNY) College at Brockport, Brockport, NY

---

**AREAS OF EXPERTISE**

Fire Debris, Trace Evidence

---

**PROFESSIONAL EXPERIENCE**

January 2022 – present	<b>Fire Debris Technical Leader</b> Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF)
September 2009 - present	<b>Forensic Chemist</b> ATF Forensic Science Laboratory – Washington
August 2008 – July 2009	<b>Criminalist I</b> Missouri State Highway Patrol Crime Laboratory Division, Jefferson City, MO
May – August 2007	<b>Student Volunteer/Intern</b> ATF Forensic Science Laboratory – Washington

---

**PUBLICATIONS**

Schwenk, L. (2022). “Broader Perspectives: Case Studies of Detection Canines in the Field – Accelerant Detection Canine. L.E. DeGreef and C.A. Schultz (Ed.). *Canines: The Original Biosensors* (1<sup>st</sup> edition, pp. 761-763). Singapore: Jenny Stanford Publishing Pte. Ltd.

Schwenk, L. “Evidence packaging for fire debris: Why vapor-tight containers matter.” *Fire & Arson Investigator*, 64(3): 24-27, 2014

Schwenk, L., & Reardon, M.R. “Practical aspects of analyzing vegetable oils in fire debris.” *Journal of Forensic Sciences*, 54(4): 874-880, 2009.

---

**PRESENTATIONS**

**Ignitable Liquid Classification of Small Engine Fuels and a Survey of Accelerant Detection Canine Responses**, Mid-Atlantic Association of Forensic Scientists Annual Conference, May 2019

**Ignitable Liquid Classification of Small Engine Fuels**, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, May 2019

**An Overview of Spontaneous Ignition**, New Jersey Fire Investigation Symposium, May 2010

**Practical Aspects of Analyzing Vegetable Oils in Fire Debris**,  
American Academy of Forensic Sciences – 60<sup>th</sup> Annual Meeting, Criminalistics Session II, February 2008  
VCU – Department of Forensic Sciences Graduate Seminar, September 2007

## TRAINING PROVIDED

---

### **Fire Debris Analysis and Courtroom Presentation, ATF Arson/Fire Investigation for Attorneys**

- Huntsville, AL, November 2022
- Philadelphia, PA, June 2022
- Huntsville, AL, July 2019
- Alexandria, VA, September 2014

### **Evidence Collection, Preservation and Laboratory Analysis for Fire Scene Evidence**

- Joint Training – Wilmington City Fire Marshals’ Office, ATF Wilmington Field Office and Delaware Office of the State Fire Marshal, November 2019
- IAAI New York Chapter, Spring Training, May 2019
- ATF Washington Field Division, Fire Investigation Seminar, September 2018
- Delaware State Fire School, Workshop for Fire Investigators, December 2017
- ATF Louisville Field Division, Fire Investigation Conference, August 2017
- Monmouth County, New Jersey Prosecutor’s Office, Fire/Arson Investigation Training, April 2016
- Maryland Fire and Explosive Investigators Association, Fire Scene Training, March/April 2015
- Pennsylvania Association of Arson Investigators, Evidence Spoliation Training, January 2015
- Gloucester County, New Jersey Prosecutor’s Office, Fire Investigator Training, November 2013
- ATF National Response Team Annual Training and Certified Fire Investigator Re-Certification, August 2013
- Kansas City Arson Task Force Conference, March 2012
- Missouri Fire and Fraud Investigation, Professional Development Symposium, October 2011

**Petroleum Products and Laboratory Analysis for the Accelerant Detection Canine Handler, ATF National Canine and Training Operations Center – Accelerant Detection Canine Certification, annual delivery 2013 – present**

**Evidence Collection and Preservation for Fire Debris, National Fire Academy – Fire/Arson Origin and Cause Investigations, 40+ deliveries**

**ATF Laboratory Services – An Overview of Forensic Capabilities, ATF Columbus Field Division Conference, May 2016**

**Laboratory Results and Canine Training, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, June 2014**

**Introduction to Fire Debris Analysis, George Washington University – Graduate Seminar, numerous deliveries**

**Fire Debris Analysis and Accelerant Detection Canines, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, June 2013**

**Ignitable Liquid Classification for the Accelerant Detection Canine Handler, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, June 2011**

## CONTINUING EDUCATION

---

December 9, 2020	2021 NFPA 921, Chapter 17 – Physical Evidence and Canine Handler Teams IAAI, Virtual
May 14, 2019	Agilent MassHunter Software Training Agilent Technologies, Inc., Linthicum Heights, MD
June 11 – 15, 2018	Textile Fundamentals North Carolina State University, Raleigh, NC
June 13 – 16, 2018	Forensic Polarized Light Microscopy US Postal Inspection Service, Dulles, VA
April 5 – 8, 2016	Forensic Examination of Textile Materials Midwestern Association of Forensic Scientists, Cincinnati, OH

January 11, 2015	FirstDefender RMX – Chemical Identification System Thermo Fisher Scientific, Beltsville, MD
July 28 – August 1, 2014	Fiber Identification Hooke College of Applied Sciences, Westmont, IL
June 2 – 6, 2014	Fundamentals of X-ray Powder Diffraction International Centre for Diffraction Data, Newtown Square, PA
January 27 – 31, 2014	ASCLD/LAB International Assessor Training ASCLD/LAB, Vienna, VA
April 30 – May 4, 2012	Forensic Polarized Light Microscopy US Postal Inspection Service, Dulles, VA
February 20 – March 2, 2012	Fire/Arson Origin and Cause Investigations National Fire Academy, Emmitsburg, MD
August 30 – September 1, 2011	Comprehensive Fire Debris Analysis National Center for Forensic Sciences, Largo, FL
August 17 – 20, 2010	Chemistry of Pyrotechnics and Explosives Dr. John Conkling, Beltsville, MD
August 3 – 6, 2010	Basic Courtroom Procedures ATF, Charleston, WV
July 12 – 16, 2010	Infrared Spectroscopy I IR Courses, Inc., Brunswick, ME
April 20 – 24, 2009	Advanced Forensic Microscopy: Paint and Polymers National Institute of Justice (NIJ) Forensic Microscopy Training Program McCrone Research Institute, Chicago, IL
March 24 – 26, 2009	Infrared Microscopy NIJ Forensic Microscopy Training Program College of Microscopy, Westmont, IL
January 19 – 23, 2009	Advanced Forensic Microscopy: Hair and Fibers NIJ Forensic Microscopy Training Program McCrone Research Institute, Chicago, IL
January 5 – 9, 2009	Forensic Polarized Light Microscopy NIJ Forensic Microscopy Training Program McCrone Research Institute, Chicago, IL

## PROFESSIONAL AFFILIATIONS

---

2016 – 2017	National Fire Protection Association (NFPA) 921: Guide for Fire and Explosion Investigators Canine Task Group, 2021 edition
2012 – present	Midwestern Association of Forensic Scientists
2012 – 2016	International Association of Arson Investigators (IAAI)
2011 – 2021	ATF National Response Team
2010 – present	American Society of Trace Evidence Examiners •Membership Committee Chair (2016 – 2019) •Membership Committee Member (2010 – 2012)
2006 – 2011	American Academy of Forensic Sciences
2005 – 2013	American Chemical Society

---

## **RESEARCH MENTORSHIP AND COLLABORATIONS**

---

Whitney, R.K. "Effective laundering conditions for ignitable liquid decontamination of fire scene clothing used by the Bureau of Alcohol, Tobacco, Firearms and Explosives." *Virginia Commonwealth University Scholars Compass*, 2020.

---

## **SCIENTIFIC MEETINGS ATTENDED**

---

2021	American Academy of Forensic Sciences Annual Meeting
2019	Mid-Atlantic Association of Forensic Scientists Annual Conference
2008	American Academy of Forensic Sciences Annual Meeting
2007	Midwestern Association of Forensic Scientists Annual Meeting

---

## **TOURS OF MANUFACTURING FACILITIES**

---

2016	Shell Refining Company, Houston, TX
2013	Delaware City Refining Company, Delaware City, DE
2011	Paulsboro Refining Company, Paulsboro, NJ



**U.S. Department of Justice**  
Bureau of Alcohol, Tobacco, Firearms and Explosives  
Laboratory Services  
Forensic Science Laboratory - Washington

The table below is a summary of expert testimony provided by Lisa Schwenk from 2019 through present.

Court Location	Testimony Date	Case Name
Rockingham County Superior Court	03/29/19	State of New Hampshire v. John Gates
Union County Circuit Court	03/19/21	State of South Dakota 63JUV20-38 (Juvenile Court)
Rockingham County Superior Court	05/17/22	State of New Hampshire v. John Gates
North Dakota District Court	03/21/23	United States v. Donavan Jay White Owl
Pierce County Superior Court	05/17/23	State of Washington v. Ezra Ralston and Sean Higgins